

# kawowy Stout

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **32**
- SRM **34.2**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **79 C**, Time **0 min**

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **79C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (77.6%)	80 %	5
Grain	Karmelowy Czerwony	0.2 kg (3.4%)	75 %	59
Grain	Czekoladowy	0.5 kg (8.6%)	60 %	788
Grain	Strzegom Karmel 600	0.5 kg (8.6%)	68 %	601
Grain	Strzegom Karmel 30	0.1 kg (1.7%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	20 g	60 min	7 %
Boil	Lublin (Lubelski)	20 g	30 min	4 %
Boil	Citra	15 g	20 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	5 g	Safale

## Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Flavor	kawa	100 g	Boil	0 min